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Managing experts of the developers' network

Timo Aarrevaara & Helena Ahonen & Jukka Öberg

ABSTRACT

As a subject the work of experts is interesting, opening a perspective on the most essential resource for an organisation, knowledge. Knowledge management, on the other hand, opens a perspective ranging from the management of issues or people to the examination of the organisation through operational methods. There is no reason to make the subject into a mystery. Solutions that support the transfer of knowledge can be very practical, such as the removal of obstacles to cooperation between people working inside organisations or the allocation of resources for cooperation between experts.

This article is based on material collected through a questionnaire to the City of Helsinki Developers' Network. The Developers' Network has a broad coverage of different sectors and professions within the City of Helsinki organisation, in such a way, however, that the work of the members of the network is mainly in the field of personnel development. We also simultaneously collected corresponding material from the Health Department Quality Network. The questions were concerned with the organisation and regulations, as well as expertise and the maintenance thereof. Based on these it is possible to draw conclusions typical for a case study that will be of assistance in understanding the function of the processes that direct the work of experts. The gathering of the material and the conclusions drawn from it are part of the quality development project "Helsinki - a vigorous capital" implemented in the City of Helsinki during the period 2000 - 2002.

Keywords: expertise, management, networks, competence

THE CHANGING ROLE OF THE EXPERT

In the formation of modern public organisations emphasis is placed on a way of working in which there are flat hierarchies and the work is partly performed in an unpredictable way using active networks. The challenges to the expertise needed by the organisations are increasingly associated with the skill of knowledge transfer alongside knowledge management.

The notions expressed in the book "The Knowledge Creating Company", the authors Ikujiro Nonaka, Hirotaka Takeuchi and Hiro Takeuchi (1995) have directed the debate on knowledge management. According to Nonaka (1994), it was not a totally new concept in the 1990's. In administrative science the same themes have traditionally been addressed under the rubric of human relations. In education, Kirsti Launis and Yrjö Engeström (1999, 65-66) state that, associated with the new operating models of organisations, there is a requirement for lowering the hierarchy of the work organisation and for taking the planning and development of the work closer to the manufacture of the products and the production of the services. Consequently, the decentralization of responsibility within organisations also breaks up the traditional territories of experts.

One can become an expert by other means than through education alone. Everyone can be an expert in everyday activities and thus creatively resolve emerging problems. From the 1980s onwards the skill that expert knowledge is based upon is seen to be broadly distributed within the organisation, and the foundation of expertise may consequently be based not only on skill but also on personality. The cooperation of various people can liberate an organisation's resources, whereby the organisation can increase its efficiency by different values (see e.g. Dreyfus - Dreyfus - Athanasiou 1986).

In Finland, emphasis has also been traditionally placed on personal characteristics in civil servant expertise (Stenvall 1995, 117). An expert works

in an organisation that "reflects his or her own image", the characteristic features of which include service-mindedness, the motivation of employees, seeking ways for cooperation, reorganisation skill, learning from feedback and investment in development work. The working group memorandum on professional management by the Ministry of Finance (MoF 2003, 20) stresses effective management. According to this memorandum, the introduction of new incentive schemes will success only if managers and supervisors have the ability and the will needed to transform their own management behaviour.

In addition to the above, the competence of experts has also been defined by other criteria at other times. In recent years Karl Sveiby's definition based on the idea of tacit knowledge has been widely used in the definition of competence. Using Sveiby's analysis as a basis, Reijo Raivola and Matti Vuorensyrjä (1998) described the building blocks of competence as being factual knowledge, skills, experience, the ethical principles of the value basis and the work community, membership of networks and the ability to work in them.

The competence of an expert may, given the above definition, be based on very different grounds. An expert may be a solitary specialist in a specific narrow field. However, the competence of an expert may also be focused on personality. In this case the expert may, for example, be a generalist who supports the work of a group. The skill of an expert to work in a group and to transfer knowledge became essential in the communal working methods, such as teamwork, that became widespread in organisations during the 1990s.

The narrow, high-level expertise of a single expert is not necessarily transferred as a resource for the organisation to utilize. Expertise often gives the holder great power that may transcend the organisation leadership's official decisions. There is a danger of generating two target worlds that compete with each other within an organisation. Unofficial competition may eat away at the organisation's energy. If the work community is strongly expert-dominated it will probably pursue expert objectives, whereby the leadership may lose its grip on the work of management. We understand leadership as primarily being the work of the manager, but

in the current network-style expert communities the traditional work of the manager, such as planning, implementation, management and giving feedback, are generally included in the tasks of many employees.

The picture of an expert drawn by Karl Erik Sveiby (1997, 57) highlights the mythically formulated characteristics of a person who guards his or her freedom and who cannot be fettered by bureaucracy, routines, the organisation, working hours, colleagues and especially not by traditional power-wielding managers.

Many organisations, such as universities, hospitals, auditing and engineering offices, work under the authority of knowledge produced by experts. Henry Mintzberg (1998, 288 - 295) claims that these professionals work relatively independently, apart from their colleagues but often close to the customers. The majority of the coordination required by the work is automatically generated through the skills and knowledge disseminated by experts. This type of standardized operation has a tendency to become repetitive practices that work mechanically. The administrative structures penetrate the experts' otherwise structured field of work in an indeterminate fashion and transfer to the experts the authority that traditionally belongs in the sphere of management activity. Direct management control serving the needs of the whole and the autonomy of experts are often in conflict with each other. Decisions are generated in the interaction processes that connect the experts and management representatives of the different departments and operational areas.

CHANNELS FOR BECOMING AN EXPERT

Why should expertise be defined? One reason at least is in the extent of the work of experts, in which case its definition is important for increasing the transparency of organisations. It is assumed that the work of experts is also increasing in the production of public services. If the opinion of experts is requested, the starting point of their work must be known. Expertise must also be defined in order to be able to guide the competences it produces. As far as the steering of an organisation is concerned, it is important to be able to define the kind of expertise that will be needed in the future and the direction in

which it would be worthwhile for the employees to develop their competences. The definition of expertise is also important in order for the experts to be able to put their own work and the utilization thereof into perspective.

Expertise may be personal in nature, when, for example, it can arise through long-term experience of working in an organisation. In large organisations there are always practices that cannot be learned through formal education. As Senge later has stated, personal learning cannot replace the skill of working with like-minded colleagues. For example, in terms of the functionality of a process one of the crucial factors is adherence to a schedule, which, within an organisation, it may often only be possible to learn through experience. Much of what is known about management practices can only be based on experience, even though the practices as such are well documented in the working rules or quality system.

Perhaps the most easily identifiable expert is one who follows the developments in his or her own branch, generally an expert who has received an academic education, such as a consultant or lawyer. An academic education is not, however, a prerequisite for expertise. New fields of activity such as IT expertise, are of such a nature that an expert can develop without of an academic education.

When demands for the horizontal transfer of knowledge are set for expertise, there is a simultaneous change in the concepts of expertise. Expertise does not create knowledge or skill as such, but rather the ability to transfer knowledge within the organisation. It is a question of the communal dimension of expertise. From this perspective even a lesser amount of skill may be of greater value when transferred than highly developed expertise that remains at an individual level. Alongside the knowledge concerning one's own sector, issues concerning the atmosphere may also be the subject of expertise. On the other hand, the ability to create networks or to be involved in these may be the subject of expertise. In "low" organisations, working as an intermediary between various professions may be a very important expert task. There is a need for expertise of this nature in multi-disciplinary teams.

The fourth type is expertise that demands the in-depth command of a single profession and

the ability for horizontal transfer. Solving new emerging problems as well as the skill to hold complex entities together is typical for experts of this kind. Expertise of this nature calls for the in-depth knowledge of an organisation born of long-term experience. At the same time the individual must be recognized as an expert in his or her field. One can only develop slowly towards expertise of this kind. For example, a command of process charts in quality work is only possible through an in-depth knowledge of the processes.

DIFFICULTY OF EXPRESSING THE PRIMARY TASK OF AN EXPERT

In the material collected' an important independent variable is the primary task of the expert. Two fifths of the respondents from the Developers' Network work as managers and in the Health Department Quality Network the corresponding amount was more than two thirds. Regarding the primary task, planning and development, however, received the greatest number of references, followed by human resource management, leadership, financial administration, quality and training. Others in the group covered general management, research, and also consultancy work.

Why did the primary task in this group break down into such different subjects? One reason may be that very different tools are used to define the primary task. In principle, the primary task is determined in the work agreement when the employment commences. The longer a person has been working for the City, the greater is the significance of tools other than the work agreement for determining the primary task.

The material that we collected indicates that it in the City of Helsinki it would not be meaningful to build up a single description of expert work and management by experts. Experts with different educational backgrounds do many kinds of work; most of them had a general higher education in terms of Ben-David (1992, 30-31). Education in the majority of respondents was not acquired with a view to entering specific occupations in opposite to professional education. The Developers' Network does not yet cover all experts. However, experts appear to have common characteristics that make it possible to deal with the subject.

Just under half of the respondents to our questionnaire reported that they worked in a managerial task. Their average number of subordinates was 19. They were not required to clarify the manager-subordinate relationship, therefore no detailed conclusions can be drawn concerning the management role of the developers. This information, however, would make it possible to compare certain elements of interaction between these two groups.

At the beginning of the 1990s the method of management by results provided a new tool for city management, performance discussions, or what are today referred to as performance and development discussions. Among the members of the Developers' Network more than half carry out performance and development discussions in social welfare and health care and educational and personnel work by sector. In technical work, central administration and city planning and real estate less than half carry out performance and development discussions.

The differences are surprisingly large. There are fewer discussions in male-dominated sectors than in female-dominated sectors. The City Planning and Real Estate Departments are departments that specialize in construction and land use planning, and can be regarded as expert organisations. Is the most important tool of the management by results method still unfamiliar to the members of the Developers' Network working in these departments, or is the organisational culture such that the support of managers is not particularly important? Are the sources of interest and appreciation elsewhere?

The performance and development discussions is a regularly held meeting between a subordinate and his or her superior, arranged in advance, for the purpose of discussion and the giving of feedback. The discussion may also be held between the manager and the entire work community. The research material suggests that, performance and development discussions generally have an effect on the content of the primary task only after some years of employment. However, in the initial stage of working for the City experts are not generally in jobs defined in the working rules.

Of the respondents, approximately one third of the Developers' Network and over half of the Health Department Quality Network have been employed by the City for at least ten years. It

is quite natural that over time the importance of the work agreement has become faded and been replaced by other tools for defining the primary task. But, on the other hand, one may ask whether it is appropriate for changes in the job description to go undocumented. If changes in the primary task are not recorded, the generation of expertise remains likewise unsubstantiated.

The research material also collected the respondents' viewpoints on where the primary task is defined. The work of those whose expertise was primarily associated with administration development was, more often than that of the others, defined in writing in the working rules, work agreement or job description. Whereas for those whose expertise focused on questions within their own sector, the primary task was above all defined through the working or management rules, but in addition, also over time or by oral agreement.

Among those respondents who mentioned expertise in their own sector, the performance and development discussions did not appear to be the arena for defining the primary task. The working rules appeared as the most important tool for defining the primary task for those in the Health Department Quality Network whose expertise focused on subjects in their own sector. This may be because that there are many departmental managers within the Health Department Quality Network whose work is determined on the basis of these rules.

Approximately one third of the respondents from the Developers' Network and more than half of the respondents from the Health Department Quality Network reported that the primary task was defined in the working rules. This cannot hold true as the work of the developers is not defined in these except in exceptional circumstances. Working rules cover the definitions approved by the heads of department for key tasks, mainly at departmental and office manager level. From this it can be deduced that the respondents understand the working rule concept more broadly than what is referred to in the practices of the City of Helsinki. Defining the primary task has apparently hardly been considered at the workplaces.

It was also conspicuous in the responses that the primary task is determined in performance and development discussions in less than 10% of the responses. Becoming established over time

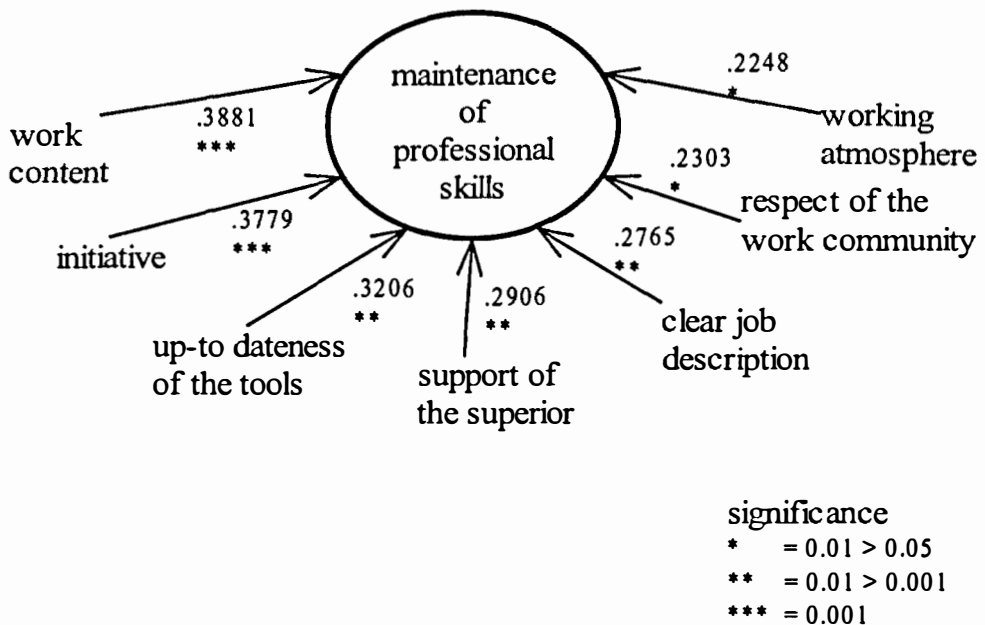


Figure 1. Factors affecting the maintenance of professional skill (Developers' Network).

may mean that the expert has "taken his or her place" in the course of time. The research material suggests that the primary task of approximately one in five of the respondents has become established with the passage of time.

THE ABILITY TO MAINTAIN EXPERTISE

The respondents were also asked how well they are able to maintain their professional skills. For the members of the Developers' Network the maintenance of expertise was to a great extent training-based. Approximately half of the mentions referred to training carried out by the City's own or some other training organisation. Women use training as a means of maintaining their expertise slightly more often than men. However, amongst the men literature and on-the-job learning received a relatively greater number of mentions than in the women's responses.

The respondents appeared to set objectives for the training. These objectives would appear to relate to basic management training. For the Developers' Network, the results are parallel to

those in a questionnaire sent to the participants in a programme for developing public management (see Temmes, Kiviniemi & Peltonen 2001, 67).

Figure 1 has been drawn on the basis of a correlation matrix for certain statements in response to a questionnaire. The correlation coefficient and statistical significance are shown on the figure. Satisfaction with the maintenance of professional skill would appear to consist of initiative and up-to-date tools. The support of the manager and a clear job description would also appear to be important in maintaining professional skill.

Satisfaction with the ability of maintaining professional skill also increases when the respondents' satisfaction with the respect of the work community and the working atmosphere, as well as the up-to-dateness of the tools increases. The significance of these is not as clear, however, as it is for work content and initiative. Can this be due to experts being individualists in their work community and therefore not primarily seeking the support of the work community? The research material collected did not provide an unambiguous answer to this question.

Slightly more than half of the respondents reported receiving clear support, encouragement for initiative, and feedback on the work from their superiors when necessary. To the same question one fifth of the respondents reported being practically completely without support. Interaction between the superior and the developer is needed for each to get the help they need to play their parts. In addition to being shown the direction, what is most needed by the developer is the presence of the superior and support when difficulties in the work manifest themselves.

However, clearly less than half of the respondents received help in resolving conflicts. One third of the respondents received no help at all in this respect. The developers can obviously do their work even without any great involvement from the superior. With regard to the resolution of difficult situations in particular, the developers appear, to a fairly large extent, to be on their own.

The superior always bears responsibility for knowing, when necessary, the reasons for conflict and the amount of energy charged in them (see Peddy 1998, 129-132). Repeated conflicts distract people from the primary task. The core of the superiors work is to ensure that this does not happen. A superior cannot delegate this responsibility to someone else. He or she has to resolve whether the conflicts have any impact on the ability of the work community to do its work. He or she is the person who needs to be close to the subordinate when that person is experiencing difficulties, not when everything is going well. Each employee is entitled to the support of his or her superior in difficult situations.

"I need someone to discuss with in my superior, someone who can take a stance on awkward questions."

"Taking a stance in situations of conflict where several parties are involved."

Synergic benefits are sought within the work communities through the construction of various cooperation networks. The greater the number of parties involved, the more one needs to dismantle the barriers to cooperation, which often appear as conflicts of interest. In this case the superior, as the protector of the interests of the whole, is often the only person whose job includes the resolution of deadlock situations. Developers

as key persons may have to handle extremely difficult situations, the solution of which is not within their authority.

If the interaction between the superior and the developer is not stable and close, the roles of the primary task may become confused. The developer must perhaps assume the superior's role and the leadership may unconsciously slip out of his or her hands. If, on the other hand, the superior intervenes very late in difficult situations, the best moment for contribution or decision-making may already have been lost. The opportunities of developers to resolve conflicts are often weaker than those of the superior, due, for example, to a lack of authority or the imprecise nature of the boundaries of the work.

FEEDBACK AS PART OF THE INTERACTION

Tacit knowledge cannot always be trusted. Great failures often derive from a superior's faith in another's supernatural abilities to read his or her thoughts and aims. The provisions and the acquisition of professional feedback are effective leadership tools. In terms of the pleasantness of the work and of learning, receiving feedback about the work is essential.

Giving indirect feedback seems to be more difficult than giving direct feedback. However, the style of superiors is reflected in their way of giving feedback (see e.g. Aarrevaara & Stenvall 2002, 36-38). In the superior-subordinate relationship it is particularly important that feedback is given in good faith. This means that the superior should be aware of what his or her aims are as a giver of feedback. If the feedback contains a message whose hidden meaning is to reprimand the employee, flatter him, show him his or her place, the worthlessness of his or her work or similar attitudes, the superior will not achieve the kind of effect that would improve the performance of the work. Feedback that contains a double message and requires interpretation will in itself arouse feelings of insecurity in the recipient.

However, a superior may approach an employee in all sincerity, but express himself so vaguely that the person receiving the feedback may interpret him wrongly. In order for feedback to lead to better working methods the superior should always express himself or herself as directly as possible and check the listener's

interpretation of the feedback. When a superior does not give any feedback at all or uses indirect methods, he or she starts up a chain of interpretation which may be very far from reality and generally fuel mistaken beliefs.

Interaction becomes difficult when something has to be said to another person that they may not be pleased to hear. Giving feedback is professional work. Criticising another person is not giving feedback. Nobody can be entitled to intrude upon the persona of a colleague, superior or subordinate. Feedback may only concern the work, and even then only if the giving of feedback is our primary task. Everything else is generally just badmouthing or unfounded criticism. In most cases giving feedback is the task of the superior. Giving feedback may also be appropriate in collegial situations when the primary tasks are interconnected within the process.

The developers were asked in what way they received feedback from the superior or work community. Every fifth respondents reported receiving feedback from the superior on a regular basis. Constant feedback can be regarded as a prerequisite for professional interaction. Almost half of the responses suggested that there was no feedback at all or that it was indirect. Without regular feedback it is difficult to develop in the work and there is a danger of adopting the wrong type of working procedures.

How has the interaction between the superior and the developer been handled in these units? The interaction needed most at the workplace is discussion of the common work. In most cases this discussion appears in the form of two-way feedback. The connection of the developer's work to the work of the management is crucial. Poor feedback on work rapidly makes the work inflexible. The more information flowing back and forth between people, so that both sides contribute equally to a common interpretation, the better the system's ability to transform (Ståhle & Grönfors 1999, 79-80). Indirect feedback was mentioned as follows:

"Very seldom direct, generally by chance (luckily mostly positive)."

"Perhaps the feedback is that there is no negative feedback, things progress smoothly."

The latter comment could probably be interpreted to mean that no news is good news. An equally possible interpretation is that no news

is bad news. The less feedback the superior gives, the more the subordinates can to create a reality about the work situation based their own conceptions.

Eighteen of the responses concerned feedback in the performance and development discussions. The amount can be regarded as small given the work that has been done in the City of Helsinki to include the performance and development discussions as part of the leadership culture. The cooperation between the superior and the developer is rather inhibited unless feedback is given on a regular basis while the work is being done and is directly related to that work. If feedback is only received once a year during the performance and development discussion, the speed and management of change remain at a low level. In this case the giving of feedback is formalistic and has little impact on the quality of the work. The research material collected suggests that the experts also have poor skills when giving feedback to their superiors.

The responses connected with the giving of feedback showed that the superiors have not perceived their role as that of maintaining constant professional interaction. For the feedback to serve the functional needs of the work community, it should primarily be direct and an exchange of information on the primary tasks of the everyday work. It would appear that the developers need to make a lot of assumptions about feedback. The more one has to work on assumptions and mental images, the more uncertainty there is in selecting the tasks to be done. In practice this manifests itself in haste and being stretched in many directions. In the absence of clear information of what one should do, one generally starts to busy oneself with a little of everything.

All in all, it would appear that between the developers and their supervisors in the work communities there are no regular and flexible mechanisms for giving feedback, which would enable the interaction to become more professional.

SUPPORT RECEIVED BY THE EXPERT AND COMMITMENT

The number of superiors in the City of Helsinki is large due to the multiple levels of administration. This means that support for the work is also sought

elsewhere than from the immediate superior in the hierarchy. On the other hand, in expert tasks work may not be assigned through the immediate superior. Such a working method may cause conflicts and inhibit the formation of a shared working method. This in turn may alienate the experts from the shared goals of the work community. For the expert, a way of working that bypasses the immediate superior may cause feelings of lack of support. For the superior, on the other hand, the situation may appear to limit his or her managerial capacity without removing any responsibility for the unit's results.

The content of the work is best understood when the superiors' support is strong, he or she is interested in the work, utilises the respondent's expertise in his or her own work and the co-operation is close. If this is not the case the understanding of the supervisor's work is also slight. An immediate supervisor's limited chance of understanding the content of the expert work does not necessarily cause dissatisfaction. The problems may rather be in the multi-level administrative chains, which convey the demand for the utilization of expertise. There were some slightly sarcastic comments about this matter in the research material:

"The superior is pleasant, however, I get more support from my superior's superior."

Initiative in the selection of work tasks was highlighted in the developers' responses. In the absence of guidance to the subordinate, that individual's job easily turns into the anathema, to the disappointment of the one concerned. Spontaneous definition may not be only the developer's own aim, as many of the respondents wanted the superior to give the direction and delineate the primary task of the developer.

"Clear guidelines for the work ... Participation if necessary in the making of decisions."

Initiative is a crucial element of expert work, which should become apparent when at the core of the work. On the other hand, the definition of the primary task is always a question of cooperation, revealing the connections between different jobs. The developers' initiative in determining of the boundary may be a threat to the work of the community, as the connection to the whole may be lost. Interaction between the parts or events is crucial (Senge 1990, 67-68). Characteristically the

parts of a system safeguard their own distinctness, separate performance measures from the overall performance and a one-sided efficiency, which is significant in terms of the whole.

If the developer's spontaneous choices are not based on cooperation with the superior, there is a danger of alienation from the needs of the whole. A strong initiative may be due to of desire or obligation. In consultancy work on the work community it is often claimed that initiative is the only option. In day-to-day management a superior seldom supports the experts, who have to make decisions without the support they would like from the superior.

The material suggests that understanding the nature of the expertise connects the expert more closely to other developers than with his or her own superior. Thus it may be laborious to discuss with a superior possibly unaware of the significance of the issues presented or the language used.

The most reported areas in which the superior can work are financial resources, the resources granted and the development of expertise. Expertise is the field where the manager can really have an impact. Developers seem to act like other experts in terms of Karl Erik Sveiby: they seek depth for their expertise from their professional colleagues either through a network, literature or training. This prompts the question of whether the experts have a common professional role or a professional code of ethics. Developers would appear to want their superiors to pay more attention to matters of the developers' expertise:

"Even knowledge about what the task area comprises and what expertise it requires."

If the superior does not adequately understand the developer's expertise then his or her expectations concerning the work of the developer will be deficient and the management will thus not be based on reality. Those working as superiors in the Health Department Quality Network are particularly critical of their own superior's grasp of the content of the work. This may be because many of the respondents from the Health Department Quality Network perceive their work through a nursing education whereas superiors view it from the medical side. As one respondent put it:

"My superior is trained in another branch, and understanding the special characteristics and the practical implementations of my own branch is difficult."

The respondents' comments contained many demands for the managerial side of the superior's work to set schedules. However, at the same time the comments also included demands for a conversational approach, increased openness and less authoritarianism in terms of the community. What kind of management style could such a superior represent, and could these requirements be fulfilled simultaneously?

The research material suggests that experts need consistency in support for their work. This may mean from the immediate superior, who stipulated when the work should be accomplished. This does not work in the same way with different people. The fulfilment of all wishes, in themselves positive, can result in an unclear management style which does not satisfy the needs of anyone concerned. The problems may also be of such a nature that they cannot be resolved by the superior.

In their responses the members of the Developers' Network reported that their expertise was not sufficiently utilised. This can be resolved by actively involving the experts in the process teams of some basic production or support process. In this way they would be regularly involved in producing a common product and would be able to utilise their expertise in the long term. This would be more satisfying for some than the rapidly changing project working style.

The material shows that the immediate superiors' skill in supporting a network-style working model may be a challenge for management. The challenges may lie in general management or in the justifications of decisions. Here the challenges to management are not primarily related to maintaining expertise but to measuring by which a network-style working model is supported. This may appear easy to achieve, but communication outside the organisation and representing the City to various interest groups is not unproblematic. In the managerial working style this area is regarded as the work of the superior. As one respondent put it:

"The role of a local government expert is really between 'a rock and a hard place', i.e. between the personnel, management, office and politicians."

Being a supervisor presupposes experience in managing the working environment. Thus supervisors may indicate whose viewpoints should be emphasized in each situation. In the Health

Department Quality Network only few respondents working as superiors were positive about supporting communication between experts and interest groups. In the Health Department Quality Network communication with interest groups is apparently the domain of superiors in terms of Bolman and Deal (1997).

INTERACTION WITHIN THE NETWORKS

Connections with the interest groups may be based on networks, but as a concept a network is more extensive than connections with interest groups. While an organisation is founded upon established modes of working, rights and obligations, a network is founded upon trust, reciprocity and shared ways of working. In practice, trust obviates any justification of the work from its rational starting, such as the guiding principles. Trust and the operational prerequisites of networks cannot therefore be created by administrative decision. Networks acquire their ways of working through experience, and changes in them do not come through planning, but through the real and tested changes in the division of labour within the network.

The above means that networks belong to the area of human activity whose main resource is social capital. In terms of their starting points, however, networks are no more moral or fair than official organisations. They may just as well create insecurity, but the incitement to create an organisation based on networks is great. When they work well they are efficient, but when they work badly those participating in the networks waste time resources.

In the public sector networking has become an important way of working for steering the activity of the organisation. Even large organisations see networking as worth aiming for, when they can increase the expertise capacity without substantially increasing financial resources. Above all, networks work in an area where the social capital contributes to the achievement of results. However, the City may be involved in many ways in cooperation relationships which it regards as networks. How do we know whether the City's partners in the cooperation regard the same cooperation relationships as networks? They may actually regard them as a relationship for the subcontracting of expertise. The issue is broad and one could consider explaining it in more

detail in another connection. It is not even always possible to give all the parties involved a suitable, unambiguous definition of a network.

Without new or redirected resources networking, however, remains merely an objective without implementation. It is generally a question of very practical matters, such as time management. In the literature at least, management questions such as how to earn people's respect and the ability to learn are connected with ways of working based on networking. In practice the matter may manifest itself as follows:

"Expertise is formed in the process of Interaction. I try to avoid having a 'know-it-all' attitude, such an attitude does not lead to good results!"

With networks it may then be a question of quite practical matters, such as the receiving and dissemination of knowledge. In this case a network may be formed for a reason completely independent of the organisation. A voluntary association of some sector may be the initiator of a network. On the other hand, a network may be formed between those implementing a common task, in which case the network is closely tied to the organisation's needs. The research material indicates that these are both strong ways of forming networks.

In the Developers' Network, the respondents involved in education and personnel work and in social welfare and health care more likely regarded an interesting person as a better reason for networking. The respondents working in education and personnel work clearly place less emphasis than the others on their own development prospects as the reason for networking. They cannot, however, be regarded as having a more pessimistic attitude towards the possibilities of networking than the others. The respondents working in education and personnel emphasized to a slightly greater extent than the others the importance of receiving knowledge as the reason for networking.

What then inhibits networking? In central administration and social welfare and health care work the reason evinced was lack of time clearly more often than in technical work and city planning, and in educational work. In technical work and in educational and personnel work approximately half of the respondents reported that there are no restrictions to networking. In some of the responses the confidentiality of the information

was seen as restricting personal networking. These answers were given with particular regard to social welfare and health care work.

Almost without exception networks were mentioned in a very positive context in the responses collected. They are seen as tools for developing one's own work, and the time they took from other tasks was hardly considered. This, even in spite of the fact that

"The sheer volume of matters nowadays prevents going into greater detail."

In terms of the current trends of ways of working networks appear to be riding the crest of the wave, and belonging to these may have an intrinsic value. Experts appear to seek feedback from networks for their own work. Networks thus compensate for what they do not receive from their own superior or the work community. These days developers work in networks to a large extent. It is a question of definition as to what are regarded as a network as a matter of definition. Networks are formed and broken up as need dictates. Too narrow a network is not sufficiently productive whereas one that is too extensive may seem unorganised, so that one cannot get the needed resources out of it.

NO SIGNIFICANT BARRIERS TO NETWORKING

A close working community that has worked together for a long time may be secure for its members. For an expert emphasising personal skill, a community that has worked for a long time and with established rules guarantees recognition of the legitimacy of the expertise. In this case the manager may be responsible for the division of labour and can guarantee that the expert will be able to work in peace. This may be a positive and also necessary prerequisite for efficient expert work. The research material shows that experts require a managerial approach in questions where the work community does not give feedback defining the content of the work.

For the organisation, the most efficient way would be if the experts were to work with as little guidance as possible. Seen from this perspective an effective management style is based on the community and its ways of working. The demand for a management style that takes account of the community emerges from in this research

material. However, an established managerial way of working within the entire organisation does not necessarily support communal expertise and the transfer of knowledge. One of the most crucial challenges facing management is the movement of knowledge across the organisation's interfaces. Examined from the communal perspective this is a matter for the supervisor's delineation and not the expert's routine.

Organisations may increase their legitimacy by working in networks, and this creates challenges for expert work. A communitarian way of working leaves the responsibility for networking primarily up to the expert himself, in which case networking is not coordinated. A managerial way of working, however, may prevent networking by limiting the use of tools and resources for communication. According to the present material the members of the Developers' Network faced hardly any obstacles to networking that were attributable to management.

Networking primarily occurs in the area of knowledge transfer, that is to say in the area in which the experts' ability to administrate and define the work is strong. The greatest obstacle to networking is in the allocation of one's own time, and not in the preferences attributable to management. Only a few of the responses contained references to such factors where involvement in networks was restricted, or working in them had resulted in negative experiences.

Experts also often know without it even being said which networks are desirable to work in and which are not. This may be a passive restriction. In close work communities with a managerial leadership style the superiors may assume that their subordinates share their objectives and values. Common conceptions concerning the people and units with whom one can work may restrict the experts' ability to network.

Only half of the members of the Developers' Network reported having had performance and development discussions. In the performance of their primary task experts also seek support from sources other than the superior-subordinate relationship. Approximately half of the respondents reported that participation in the activity of the Developers' Network supported them in the performance of their primary tasks. The importance of the primary task, however, is crucial. It connects the expert to the organisation and determines the definition of the work. The importance of the work

becomes evident through the management and the primary task. If the management does not support the performance of the primary task the employees will seek support for the primary task elsewhere.

As the primary work of each developer is not clearly defined and the developers mainly choose their work themselves, one might suppose that this would lead to differences in opinion regarding the prioritisation of the work. The potential for conflicting interpretations is greater in those workplaces in which the manager is felt to be distant and where there is little continuous interaction. It is difficult for the developers to create a strong professional role when their understanding of the boundaries of their own work is vague.

The respondents to the questionnaire felt that they received more actual support for their work from their own professions than from their managers. The developers thought that the managers are too unaware of the reality of their work. They often did not have the support of their managers, especially when dealing with difficult matters.

The greatest challenge is presented by the interaction between the developer and the manager. The better the connection, the more flexibly can the boundaries of the primary task of the manager and the developer be set. Professional interaction calls for an adequate amount of clear agreement on objectives and the principle work methods, in order for each to be able to work independently and effectively. The present material indicates that flexible transition from the individual world to the world of cooperation is variable and apparently based more on the developers' and their managers' personal work methods than on professional norms. The same can be said of the giving of feedback: in practice there are many kinds of mechanisms, the majority of which originate in the world of indirect methods.

According to the material of this study, expert work is described fairly extensively as processes. Although process-thinking is relatively new within the City of Helsinki organisation, over two thirds of the respondents report having described the key processes of their work. Experts appear to have a need for their expertise to be utilized to a greater extent within the organisation. If the experts participate in the work of the process

teams for developing the key processes of their division, then this, if anything, connects the experts to the work community and organisation.

Increasing the description of processes and the performance and development discussions are tools that can enable knowledge to be transferred more efficiently within the organisation. Descriptions of the cross-border processes of organisations would support a network working model, in which case both units and experts would be working within the network. With regard to supporting the work of experts, the major challenge would not then appear to be in the networking of the experts but of their work communities to their own working environment.

No special obstacles characteristic of the work of experts for the operation or networking of processes were found in the material of this study. However, the practices that supported networking varied greatly. This is evident in various practices, for example in relation to the acquisition of tools, showing hospitality, travelling or participating in seminars or conferences abroad.

According to this material experts are independent in their work and also independently maintain their professional skills. The independence in this work is a matter that is resolved on a case-by-case basis depending on the person and the nature of the work. However, independence is not supported when the definition and importance of the primary task are less significant. Some members of the Developers' Network did not know what their primary task was or where it was defined. Such definition is the task of management. The tasks of the experts may also change rapidly. Nonetheless, the work of a clear majority of the respondents was defined in the work contract as well as in the development discussion.

Why do experts differ from other members of the organisation in terms of belonging to the group, contribution and acceptance? This is a question of the community as a central factor in ensuring that the knowledge created by the expertise can be transferred within the organisation.

The need to define the work can be accomplished either through the manager or the community, but usually both. Since in many of the municipal workplaces the essence of the work and the work methods remain the same for a relatively long time, it is clear that the primary tasks have taken shape over time and tacit agreement

prevails regarding their content.

It appears that experts are given a great deal of freedom in the organisation of their work. The reason for selecting an expert task may be in the ability to do independent, long-term work. However, it was repeatedly stated that engaging experts meant acquiring problems for the organisation. Prophecies may be self-fulfilling. It may be that the problems referred to that have become evident do not, in themselves, have anything to do with the work of experts. Problems always arise if job descriptions are left undone. Seen from this perspective, too, the problem lies in the management and not in the actual nature of the work.

Setting limitations in the job description based on expertise does not signify stopping development at bureaucratic borders. Job descriptions should be changed as the expert and the need changes. The definition of the jobs of some of the respondents did not seem to be at all up to date. According to the responses the definition was concluded, for example, in a work agreement made decades earlier. An up-to-date job description advances the transfer of expertise for the use of the work community. It could be a good practice to update the job description at five-yearly intervals, for example, providing that the following year's key results would be incorporated into the annual performance and development discussions.

A challenge facing management is to identify the perception of those situations in which the work of the expert can be supported through management. The research material collected did not support the myth of experts as awkward employees. Commitment to the work community may vary according to work-related factors. Experts seek clarity in their job descriptions and specification of what is expected of them. One issue is the management of experts is whether the expert's work involves carrying out personal projects or whether the expert's task is to support the manager or other members of the work community in the achievement of their goals.

The importance of direct or spontaneous feedback is emphasised particularly in processual work methods. Feedback is given both in superior-subordinate discussions and in peer discussions. Giving feedback, however, is a task that calls for professional skill and may have positive or negative impacts. The research material suggests that there is no common practice for giving feedback

in the working culture of the City of Helsinki. For example, it was not possible to provide an unambiguous definition of the difference between feedback and criticism.

It would appear that approximately one third of the respondents receive no feedback at all from their managers. Although a manager may sometimes find it difficult to comment on the content of an expert's work in perhaps a different sector, feedback should always be given about the importance of the primary task.

The respondents show that network-based work does indeed occur among the members of the City of Helsinki Developers' Network. This processual way of working, often associated with the acquisition of new information, has at no stage been called into question by an employer.

CONCLUSIONS

Communicating actively in the network the experts obtain ample knowledge about the organisation itself and its environment. Expertise often gives the holder great power that may exceed the organisation leadership's official decisions. There is a danger of generating two competing target worlds that compete each other within an organisation. Unofficial competition may sap the organisation's energy. If the work community is strongly expert-dominated it will probably pursue expert objectives, and the leadership may lose its grip on the work of management.

According to the developers the superiors do not quite see their role as that of mediators of the knowledge that the experts produce. There seems to be a group of autonomous experts who are more or less left alone. When the interaction with one's superior does not work sufficiently well the superior evidently loses touch with the reality as represented by the developer, who often has a wide view into what is going on in the organisation. Since the superiors were not reviewed we cannot assess of the relevance of this information nor of the eventual other channels they might use to widen their perspectives. However, it is tempting to believe that both the expert and the superior lose some of their true ability to influence the well-being of their organisation due to the lack of shared reality.

The distance between the developer and his or her superior may also impair the quality of knowledge. If there is not enough interaction both

parties will shrink and lose their active roles. The superior may only receive knowledge which can be disseminated on the rational level through documents and dialogue in formal meetings. Much of the vital information resists such strict forms and can only be imparted through continuous and free personal contact.

Information based on emotion is crucial in connection with any major project that is likely to meet with resistance. And further, the superior always bears the responsibility for being aware of any conflicts, their reasons and the amount of energy invested in them. He or she has to resolve whether emotions have any impact on the ability of the expert to do his or her work. He or she is the person who needs to be close to the subordinate when the person is experiencing difficulties, not when everything is going well. Every employee is entitled to the support of his or her superior in difficult situations.

The results show clearly that the developers need support in difficult situations. They also want the superior to show the direction and to help them to define the primary task. In day-to-day management a superior does not often support the developer, who has to fall back on initiative as there is no-one to ask. The developers' wishes for guidance were as simple as setting schedules and sticking to them and expressing clearly what the superiors expect of the developer.

The primary tasks of experts are often not defined in writing and not even orally. The reason may be that experts do not want anyone to interfere with what they are doing, or is this just lack of management?

With management by performance as the guideline it is the results that count, not how they are achieved. The experts in this material reported that their job descriptions have become obsolete, and that no regular performance and development discussions are held. Of course, this is no obstacle to literate persons to being fully aware of the strategies and to act in line with them.

With growing emphasis on economic values and the revival of the process concept through quality thinking, the City of Helsinki has observed that the present procedure is not satisfactory. Clear objectives are essential in large organisations. In smaller organisations, organic operating methods may replace job definitions based on the results concept. A major city cannot, however, rely solely

on the ability of its employees or smaller operating units to find effective working methods. The need for the guidance of specialists is evident.

The practical means for increased coordination include manners of description and models of management for processes, management of project work, transfer of best practices, different forms of performance and development discussions, and evaluation practices of operations. Through increased management by knowledge it is possible to avoid the evaluation problems typical for management by performance.

The question of feedback seems to be quite obscure in this group. Only a few mention it in connection with the performance and development discussions although much work has been done in the City of Helsinki to include these discussions as part of the leadership culture. The cooperation between the superior and the developer is somewhat inhibited unless feedback is given on a regular basis during the daily work and is directly related to the work being done. If feedback is only received once a year during the performance and development discussion, the speed and the management of change will be poor. In this case giving feedback is formalistic and has little impact on the quality of the work. According to our material the experts are also poorly equipped for giving feedback to their superiors. All in all the concept of professional feedback with its normative aspects does not seem to be used or even understood by the majority of the respondents.

Experts naturally appear to seek feedback on their own work from networks. Networks thus compensate for what they do not receive from their own superior or work community. Belonging to networks seems to be based on professional rather than personal ties. Many of the respondents pointed out the need for shared understanding from colleagues to substitute for the lack of support from the leaders.

NOTE

¹ In the Developers Network there were 93 respondents, response rate 53.4% and in the Health Department Quality Network there were 30 respondents, response rate 44.3%

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